

for cost of energy. Prices at the zip-code level are obtained from Open Energy Info¹² and compiled by NREL and Ventyx for both investor-owned utilities (IOU) and non-IOU utilities. Approximately 1,300 zip codes were without data. They were estimated from neighboring zip codes and through manual lookup. These zip-code level neighborhood variables were then added to the address-level loan information. The addresses were then de-identified and the analysis conducted on this dataset.

Overall, the final analysis file for the baseline model includes information on about 71,000 loans. This number results from limiting the sample to 30-year fixed-rate mortgages,¹³ the first five years after origination, loans with original loan-to-value ratios between 50% and 150%, and excluding cases with missing values in key determinants. All 71,000 loans are included in our baseline model estimation. Only the Energy Star homes (~35% or 21,000) are included in the model that examines the relationship between the extent of energy efficiency and mortgage termination risks.

Descriptively, Energy Star homes show lower incidences of default and prepayment. About 23% of the Energy Star home loans prepaid compared with 33% for the non-Energy Star group. Similarly, while mortgages on only 8% of Energy Star homes have experienced default (on average after 29.9 months), about 15% of mortgages on the non-Energy Star homes group did (on average, after 30.8 months). Other notable differences include the fact that Energy Star houses are newer than other homes and, while the average Energy Star house is larger, the price per square foot

¹² <http://en.openei.org/wiki/Gateway:Utilities> (Accessed September 2012).

¹³ Adjustable-rate mortgages (ARM) and other types of loans require panel data that tracks the payment schedule and time-varying attributes. Such data are not available and the models used in the study are not suitable to study such mortgages, but should be considered in future work.